



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,671	01/29/2004	Stephen Gerard Nikodem	21666-1	5421

7590

06/15/2005

John S. Beulick
Armstrong Teasdale LLP
Suite 2600
One Metropolitan Square
St. Louis, MO 63102

EXAMINER

BUMGARNER, MELBA N

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/767,671

Applicant(s)

NIKODEM, STEPHEN GERARD

Examiner

Melba Bumgarner

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The applicant has noted on page 7 of the remarks that a replacement sheet including changes to figure 5 is attached; however, the replacement sheet was not submitted in the amendment of March 29, 2005.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "46" has been used to designate both "eyelets" page 4 and "body" page 7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: the changes to the specification in the amendment of March 29, 2005 has duplicated paragraph [0025]. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, 9, 11-14, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ziegler (4,187,610). Ziegler discloses an apparatus comprising a wire comprising a first end, a second end and a substantially planar body extending therebetween, the first end configured to couple to a tooth that is at least partially impacted, the second end configured to secure the apparatus relative to the tooth. The body comprises at least one eyelet formed between the ends. The body is unbraided between the ends. The body is sinusoidal shaped. The first end is capable of coupling to the tooth. The apparatus has a substantially uniform thickness between the ends. The apparatus further comprises an orthodontic fixture configured to be secured against an external surface of the tooth 12. Ziegler discloses a method of using the apparatus as claimed.

6. Claims 1-3, 5, 6, 8, 9, 11-14, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Terry (5,112,221). Terry discloses an apparatus comprising a wire comprising a first end, a second end and a substantially planar body extending therebetween, the first end configured to couple to a tooth that is at least partially impacted, the second end configured to secure the apparatus relative to the tooth. The body comprises at least one eyelet formed between the ends. The body is unbraided between the ends. The first end is capable of coupling to the tooth. The apparatus has a substantially uniform thickness between the ends. The body comprises a spring extending between the ends. The apparatus further comprises an orthodontic fixture configured to be secured against an external surface of the tooth 12. Terry discloses a method of using the apparatus as claimed.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry in view of Sachdeva et al. (5,312,247). Terry discloses an apparatus that shows the limitations as described above; however, Terry does not show the wire fabricated from a superelastic material or shaped memory alloy. Sachdeva et al. teach an orthodontic wire which applies a continuous force to the tooth comprising superelastic or shaped memory alloy. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus which uses the force of the spring of Terry with the wire of superelastic material of Sachdeva et al. in order to use a force supplying wire that can be easily shaped or manipulated for placement by the practitioner in view of Sachdeva et al.

Response to Arguments

9. Applicant's arguments filed March 29, 2005 have been fully considered but they are not persuasive. The prior art show the structural limitations of the claims. In response to applicant's argument that the prior art does not suggest an apparatus for facilitating treatment of a tooth that is at least partially impacted, wherein the apparatus is secured relative to the tooth such that the apparatus wire applies a substantially continuous force to the tooth, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the

Art Unit: 3732

prior art structure is capable of performing the intended use, then it meets the claim. The arguments that Zeigler shows repositioning and Terry shows the amount of force dependent upon the location of the spring arm are irrelevant. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). The use of shape-memory alloy in orthodontic appliances is shown in Sachdeva et al.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication and earlier communication from the examiner should be directed to Melba Bumgarner whose telephone number is 571-272-4709. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached at 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Melba Bumgarner". The signature is written in a cursive, flowing style.

Melba Bumgarner
Primary Examiner